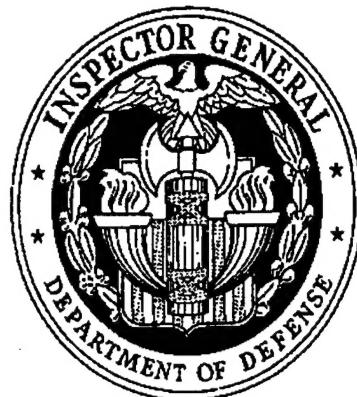


# **E**valuation



# **R**eport

OFFICE OF THE INSPECTOR GENERAL

**EVALUATION OF SIERRA ARMY DEPOT  
GROUNDWATER CONTAMINATION**

Report No. 97-137

April 29, 1997

19991022 115

**DEPARTMENT OF DEFENSE**

ADI 00-01-0156

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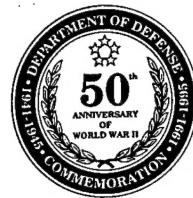
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### **Acronyms**

BLM	Bureau of Land Management
EIS	Environmental Impact Statement
NEPA	National Environmental Policy Act
TCE	Trichloroethylene
TMP	Truckee Meadows Project
USGS	United States Geological Survey



**INSPECTOR GENERAL**  
**DEPARTMENT OF DEFENSE**  
**400 ARMY NAVY DRIVE**  
**ARLINGTON, VIRGINIA 22202-2884**



April 29, 1997

**MEMORANDUM FOR THE AUDITOR GENERAL OF THE ARMY**

**SUBJECT: Evaluation Report on Sierra Army Depot Groundwater Contamination  
(Report No. 97-137)**

We are providing this report for Army information and use. We performed the evaluation as requested in House Report 104-863, "Making Omnibus Consolidated Appropriations for Fiscal Year 1997," the Conference Report to Accompany H.R. 3610 (P.L. 104-208), September 28, 1996.

We provided a draft of this report to you on April 3, 1997. Because the draft of this report contained no recommendations, comments were not required, and none were received. Therefore, we are publishing this report in final form.

We appreciate the courtesies extended to the evaluation staff. Questions on the evaluation should be directed to Mr. William C. Gallagher, Evaluation Program Director, at (703) 604-9270 or Mr. Douglas P. Neville, Acting Evaluation Program Manager, at (703) 604-9423. See Appendix P for the report distribution. The evaluation team members are listed inside the back cover.

Robert J. Lieberman  
Assistant Inspector General  
for Auditing

## Office of the Inspector General, DoD

Report No. 97-137  
(Project No.7CB-5013)

April 29, 1997

### Evaluation of Sierra Army Depot Groundwater Contamination

#### Executive Summary

**Introduction.** This evaluation was requested by the committee of conference in House Report 104-863, "Making Omnibus Consolidated Appropriations for Fiscal Year 1997," the Conference Report to Accompany H.R. 3610 (P.L. 104-208), September 28, 1996. The Congressional conferees were concerned about allegations from a group of investors that the Army precipitously and abruptly changed its position on permits and applications to develop water rights in the Honey Valley Groundwater Basin, and damaged the interests of the investors. The investment venture was to transport drinking water through an underground pipeline to the Reno-Sparks, Nevada metropolitan area. The transport of water required the construction of a pipeline that would cross federally-owned land administered by the Department of Interior's Bureau of Land Management. The Bureau of Land Management, in turn, required the investors to fund the preparation of an Environmental Impact Statement. To assist in the development of the impact statement, the Bureau of Land Management designated the Sierra Army Depot as a cooperating agency in accordance with the provisions of the National Environmental Policy Act. The Inspector General, DoD, was requested to investigate the validity of the investors' allegations and, if deemed appropriate, recommend a process for determining fair compensation for those investors. The committee requested that the IG, DoD provide a report to Congress by May 1, 1997.

**Evaluation Objective.** The overall evaluation objective was to address the Congressional tasking.

**Evaluation Results.** There was no indication that the Army took any inappropriate actions. Specifically, the evaluation provided the following results.

- o The evaluation did not substantiate the allegation that the Sierra Army Depot concealed the existence of on-post subsurface contamination from all involved Federal and Nevada authorities. Further, we did not substantiate the investors' concern about the potential for the migration of Depot contamination toward the production well-field.

- o The evaluation did not substantiate the allegation that the Army precipitously and abruptly changed its position on permits and applications to develop water rights in the Honey Valley Groundwater Basin.

- o The evaluation did not substantiate the allegation that the Army conducted a media campaign to turn the public against the Truckee Meadows Project.

o The evaluation partially substantiated the allegation that the Army opposed the Truckee Meadows Project and blocked finalization of the Environmental Impact Statement. The Army actions were in accordance with the specific decision-making process required by the National Environmental Policy Act. Further, the Army concerns represent only one of three reasons why the Secretary of the Interior suspended the finalization of the Environmental Impact Statement for the project.

We concluded that the Army has not acted in a negligent or unfair manner. Therefore, we are not recommending a process for determining compensation to the private investors.

**Management Comments.** We provided a draft of this report to the Army on April 3, 1997. Because the draft of this report contained no recommendations, comments were not required, and none were received. Therefore, we are publishing this report in final form.

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## **Part I - Evaluation Results**

### Evaluation Background

This evaluation was requested by the committee of conference in House Report 104-863, "Making Omnibus Consolidated Appropriations for Fiscal Year 1997," the Conference Report to Accompany H.R. 3610 (P.L. 104-208), September 28, 1996. The Congressional conferees were concerned that the Army precipitously and abruptly changed its position on permits and applications to develop water rights in the Honey Valley Groundwater Basin, and unfairly and unnecessarily damaged the ability of the private investors to realize any benefit from their good faith investments. The Inspector General, DoD, was requested to investigate the validity of the investors' allegations and, if deemed appropriate, recommend a process for determining fair compensation for those investors.

**The Truckee Meadows Project.** The Truckee Meadows Project (TMP) is an exportation/importation plan that involves public and private investors to increase the municipal and industrial water supply of the Nevada metropolitan area known as Reno-Sparks. The TMP is designed to transport drinking water through an underground pipeline to that metropolitan area which is located approximately 38 miles south of the water source. The pipeline would cross federally-owned land administered by the Department of the Interior's Bureau of Land Management (BLM). An area map, showing the TMP and its relationship to the Sierra Army Depot (the Depot), is provided in Appendix B. Additional background on the TMP is provided in Appendix C.

**Environmental Impact of the TMP.** The construction of pipelines across federally-owned land required a right-of-way permit from the BLM. As provided in the Code of Federal Regulations, Title 43, Part 2800, the BLM may take any action necessary to fully evaluate an application for grant or permit. For this specific application, the BLM required the TMP investors to assess the environmental impact of that Federal action by funding an Environmental Impact Statement (EIS). To assist in the development of that document, the BLM designated the Depot as a "cooperating agency" in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, United States Code, Title 42, Section 4321 et seq. The Depot had special expertise with respect to the environmental impact involved in the proposal. Other cooperating agencies were the U.S. Department of the Interior, the U.S. Environmental Protection Agency, and the Pyramid Lake Paiute Tribe. A draft EIS was published for comment in May 1993. A more extensive discussion of the environmental impact process is provided in Appendix D.

**Sierra Army Depot.** The Depot is located near Herlong, California, approximately 12 miles west of the TMP production wells. The mission of the Depot is to receive, store, issue and renovate munitions; and to efficiently and safely demilitarize surplus ammunitions. In execution of the Depot's mission, toxic contaminants were released into the soil on the Depot grounds. Since

1979, the Depot has pursued an installation restoration process to identify, categorize and remediate those existing contaminants. A more extensive discussion of the installation restoration program is provided in Appendix E.

## Evaluation Objective

The overall objective was to determine if the allegations by the private investors were valid and, if deemed appropriate, to recommend a process for determining fair compensation for those investors. See Appendix A for a discussion of the scope and methodology.

## Investors' Allegations

The investors of the TMP alleged that the actions of the Army and the Depot unfairly and unnecessarily damaged the ability of the private investors to realize any benefit from their investments in the TMP. Specifically the investors made the following allegations.

1. The Depot concealed from all involved Federal and Nevada authorities the existence of on-post subsurface contamination. The investors were also concerned about the potential for the migration of Depot contamination toward the production well-field.
2. The Army precipitously and abruptly changed its position on permits and applications to develop water rights in the Honey Valley Groundwater Basin.
3. The Army conducted a media campaign to turn the public against the TMP.
4. The Army blocked the finalization of the EIS.

## Disclosure of the Existence of On-Post Contamination

**Allegation 1:** The Depot concealed the existence of on-post subsurface contamination from all involved Federal and Nevada authorities. The investors were also concerned about the potential for the migration of Depot contamination toward the production well-field.

**Evaluation Results.** The allegation was not substantiated. The evaluation shows that Federal and State of California agencies were aware of

## Evaluation Results

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contamination on the Depot since at least 1982. All documents submitted to those agencies are a matter of public record and were available for review by Nevada officials and private parties.

**History of Contamination and Disclosure.** Since at least 1979, the Army was aware of contamination at the Depot. Agencies outside the Army were aware of Depot contamination since at least 1982. From 1979 through 1996, the Depot tested soil and groundwater to ascertain the nature, quantity, and extent of contamination. In December 1979 and September 1983, the U.S. Army Toxic and Hazardous Materials Agency and Army contractors, respectively, reported on their evaluation and reassessment of the potential for contamination at the Depot. Those studies were limited to a review of related documents. A comparative timeline, depicting the key events associated with the Depot's remediation efforts and the TMP, is provided in Appendix F.

**Contamination Assessed in December 1979.** In 1979, the U.S. Army Toxic and Hazardous Materials Agency performed an Installation Assessment of the Depot. (The purpose of an Installation Assessment is discussed in Appendix E.) That agency concluded that there were 34 potentially contaminated sites at the Depot. The agency also stated, "No data were uncovered to indicate the migration of contaminants beyond the installation boundary."

**Contamination Reassessed in September 1983.** In September 1983, Environmental Science and Engineering, Inc., an Army contractor, presented their reassessment of the 1979 study to the U.S. Army Toxic and Hazardous Materials Agency (Report No. DRXTH-AS-LA-83149R). The report documented the involvement of California and Federal agencies in 1982 and 1983. The report depicted a pattern of interaction between the Depot and both the California Department of Health Services, and the United States Environmental Protection Agency, during that time period.

**Disclosure to U.S. Geological Survey.** In April 1987, the U.S. Geological Survey (USGS) began a study of groundwater quantity in the Honey Valley Basin which included the Depot. That study was directly associated with the TMP. When the study began, Depot personnel invited the USGS project manager (who was also a hydrologist) to measure the wells used by the Depot to monitor base contamination.

**Disclosure to California Department of Health Services.** In addition to the USGS, representatives of the California Department of Health Services also recognized the existence of Depot contamination in 1987. In December of that year, a Senior Waste Management Engineer with the California Department of Health Services sent an interoffice memorandum to a Department of Health Services Hazardous Materials Specialist. The memorandum referenced the conclusions of both the 1979 and 1983 studies previously discussed. The same memorandum recognized the existence of trichloroethylene (TCE) as a possible contaminant on the Depot. Trichloroethylene is a toxic organic solvent previously used at the Depot.

**Disclosure to California Regional Water Quality Control Board.** In June 1988, the California Regional Water Quality Control Board - Lahonton Region issued "Cleanup and Abatement Order No. 6-88-107." That report confirmed the existence of contaminants on the Depot such as TCE and carbon tetrachloride "in concentrations greater than the Department of Health Services' Action levels." The Regional Board's project manager affirmed that his office "had known of significant water quality contamination at the depot since at least 1987. . . ."

**Disclosure to U.S. Environmental Protection Agency.** The United States Environmental Protection Agency was also aware of Depot contamination in 1988. In an undated letter, the Chief, Site Evaluation and Grants Section, United States Environmental Protection Agency, Region IX, discussed an attachment titled Federal Facility Review, dated November 1993. The Federal Facility Review, in turn, mentioned that the Depot was identified as a potential hazardous waste site. Further, the Federal Facility Review stated, "The site was entered into the Federal Agency Hazardous Waste Compliance Docket on February 12, 1988."

**Disclosure of the TCE Plume.** In April 1993, during a Remedial Investigation/Feasibility Study started in 1992, the Army contractor (Harding Lawson Associates) sampled an area of the installation, referred to as Building 210, for contaminants. (The purpose of a Remedial Investigation/Feasibility Study is discussed in Appendix E.) The feasibility study concluded that TCE was detected in "relatively high concentration" subsequently referred to as a plume. The study also discussed "the current and potential migration of TCE." Depot personnel, in turn, provided this information to the California Regional Water Quality Control Board - Lahonton Region on May 6, 1993. In addition, on May 25, 1993, the Depot's public affairs officer issued a press release to the media in Susanville, California and Reno, Nevada. The purpose of that press release was to notify the public that the Army identified TCE in on-post monitoring wells.

**Disclosure to Nevada Authorities.** The Army did not directly inform Nevada authorities of contamination on the Depot as a routine matter because Army officials believed that the contamination would not affect the State of Nevada. This opinion was shared by the Executive Officer, California Regional Water Quality Control Board - Lahonton Region, in an August 11, 1993, letter to the Nevada Division of Environmental Protection. A copy of that letter is provided in Appendix G.

**Disclosure Opportunities.** The TMP investors alleged that the Depot had many opportunities to reveal the existence of toxic contamination on the Depot. Specific instances where the investors alleged the Depot should have revealed the existence of contamination, but did not, were pursued in this evaluation.

**USGS Study.** From 1987 to 1990 the USGS executed a study titled "Ground-Water Resources of Honey Lake Valley, Lassen County, California, and Washoe County, Nevada." The investors alleged that the Depot deliberately concealed its subsurface contamination issues from the USGS study.

## Evaluation Results

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This allegation was discussed with USGS personnel during the evaluation. The project manager (and hydrologist) of the USGS study told us that, in 1987, Depot representatives informed her of the contamination at the Depot. Specifically, Depot representatives invited her to measure the wells used by the Depot to monitor base contamination. This disclosure was made notwithstanding the fact that the USGS specifically excluded issues of water quality from their study.

**Nevada State Engineer Hearings.** From June to September 1990, the Nevada State Engineer held a series of hearings concerning applications and protests surrounding the inter-basin and intra-basin transfer permits needed for the TMP. The investors alleged that the representatives of the Depot, who testified at those hearings, refused to disclose the extent of Depot groundwater contamination.

The transcripts of the hearings revealed that there were at least eight instances where contamination, or the potential for contamination at the Depot, was mentioned. For example, consultants hired by Lassen County, California commented several times at the Nevada State Engineer hearings about the probability of contamination existing at the Depot. In addition to testimony by consultants, the Depot engineer responsible for managing the Depot water distribution system and wells also testified about Depot contamination. Specifically, the engineer revealed that the U.S. Army Hazardous Materials Agency was "performing a remedial investigation and feasibility study on the possibility of toxic contamination at 22 sites" on the Depot. The extent of the groundwater contamination, however, could not be presented because the remedial investigation intended to determine the extent of the contamination did not begin until 1989, and would take several years to complete.

**Information About Toxic Contaminants Appearing in the Domestic Water Tap.** The investors alleged that, during the 1990 Nevada State Engineer hearings, Depot representatives "purposely failed" to disclose information about toxic contaminants appearing in the domestic water taps. That allegation was based on an April 29, 1991, letter from the Deputy Chief of Staff for Engineering, Housing, Environment, and Installation Logistics, U.S. Army Materiel Command, to the Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health). In that letter, the Deputy Chief of Staff referenced a consultant's report which concluded that the "hazardous/toxic constituents from beneath the [Depot] . . . may eventually appear at the domestic water tap at Reno-Sparks area." A copy of that letter is provided in Appendix H.

The investors were partially correct in stating that the Army did not disclose information about the potential for toxic contaminants reaching domestic water taps. On December 14, 1990, three months after the Nevada State Engineer hearings ended, a consultant hired by the Depot (Slosson and Associates) provided a report concluding that the contamination could reach the domestic water taps. That conclusion was forwarded to higher headquarters and was presented in the April 29, 1991, letter previously mentioned. This letter, however, was internal Army correspondence. The consultant's conclusion about the contamination reaching the domestic water taps was never endorsed by

Headquarters, Department of the Army, and therefore was not publicly released.

Depot personnel told the TMP investors that Depot contamination could move off the Depot. During the time of the Nevada State Engineer hearings (June through September 1990), the Army released correspondence about the potential for Depot contamination being drawn off-post. In a letter to the BLM dated August 20, 1990, the Depot's Director of Engineering and Housing expressed concern that, "Migration of water underground could also result in movement of existing contamination to a wide area off of the Depot." The letter also stated, ". . . currently a detailed study of groundwater pollution under the Depot is being conducted." A copy of that letter is provided in Appendix I. Distribution on the letter indicates that an information copy was forwarded to the attorney representing the TMP Investors.

**Comments on the Preliminary Draft EIS.** In 1992, the BLM released a preliminary draft EIS for comment. The investors alleged that, following the discovery of a TCE plume at the Depot, the Army took no action to inform Nevada authorities, or to revise its comments on the EIS.

The Depot did not immediately inform Nevada authorities of the existence of the TCE plume. However, this does not connote concealment because California officials were immediately informed and the information was available for public review. Depot personnel stated they did not immediately inform Nevada because they did not believe the plume would impact that State. This belief was shared by the California Regional Water Quality Control Board - Lahonton Region. Specifically, on August 11, 1993, the Executive Officer of the Control Board corresponded with the Administrator, Nevada Division of Environmental Protection. The Executive Officer stated in the letter, "neither the previously identified contaminants, nor the recently publicized TCE plume present an eminent threat to Nevada water quality interests." All disclosures made to the California Regional Water Quality Control Board - Lahonton Region are a matter of public record.

The investors were not correct in alleging that the Depot did not revise its comments on the EIS. On September 15, 1993, the Depot submitted extensive comments on the draft EIS that included a discussion of the TCE discovery. The comments specifically stated, "A large plume of trichloroethene was discovered. . . ."

**Allegation Summary.** The TMP investors alleged that the Depot concealed the existence of contamination from Federal and Nevada authorities. Specifically, the investors alleged that the Depot did not disclose the existence of contamination to the USGS or the Nevada State Engineer. The investors also alleged that the Depot "purposely failed" to disclose information about contamination reaching the domestic water tap at Reno-Sparks. Finally, the investors alleged that following the discovery of a TCE plume at the Depot, the Army took no action to inform Nevada authorities, or to revise its comments on the EIS. The allegation was not substantiated. Specifically, the evaluation indicated the following:

- o Depot representatives informed the USGS of the existence of Depot contamination in 1987.
- o Depot representatives, as well as others, extensively disclosed the existence, or the potential existence, of Depot contamination in the Nevada State Engineer hearings.
- o Headquarters, Department of the Army did not endorse a consultant's conclusion about contamination reaching the domestic water taps.
- o The Army did not conceal from Nevada authorities the discovery of a TCE plume on the Depot or the potential migration of that plume toward the production well-field.

## Army Position

**Allegation 2:** The Army precipitously and abruptly changed its position on permits and applications to develop water rights in the Honey Valley Groundwater Basin.

**Evaluation Results.** The allegation was not substantiated. Documentation shows that the position of the Army has been consistent throughout the development of the TMP.

**History of Army Concerns.** From 1986, through 1995, the Army continued to express concerns about changes in water usage impacting the Depot. In December 1986, the Depot Commander corresponded with the Nevada State Engineer concerning the relocation of pumping wells near Fish Springs Ranch in the Honey Valley Basin (see Appendix J). The Commander of the Depot expressed concern that any change to the aquifer (underground formations that hold water) might deteriorate the quality of available water. In a letter dated May 24, 1995, the Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health) reiterated the Army's concerns that "the Project could have adverse effects on the water supply and groundwater contamination at [the Depot]." A copy of this letter is provided in Appendix K.

In 1986, the Fish Springs Ranch, LTD submitted an application to change the "point of diversion and place of use" for water rights under its control. In 1989, several parties, including the Depot, protested that application in accordance with Nevada State law. Depot personnel were concerned about the impact that a change in the point of diversion and place of use would have on the quality of Depot potable well water.

As a result of this and other protests of the application, the Nevada State Engineer held the previously discussed hearings from June to September 1990. The Depot fully participated in those hearings in an attempt to quantify the effects of the permit application on the Depot.

In May 1993, the BLM published a draft EIS to show the potential impact of the TMP on the environment. As provided by the NEPA, representatives of the Depot participated in the development of that document as a cooperating agency. Our review of the correspondence between the Depot and BLM concerning this project showed that Depot personnel worked to ensure that the EIS accurately reflected the potential impact of the TMP on the Depot.

On September 15, 1993, the General Counsel for the Depot provided the BLM Lahonton Area Manager with official Depot comments concerning the draft EIS. In that letter, the Depot General Counsel said that, despite the Depot's cooperation as a Federal agency, the Depot could not endorse or approve the draft EIS in any way. He characterized it as being "incomplete and inaccurate." He also urged the BLM not to allow the TMP to continue until the effects of the project on the Depot could be shown with some certainty.

**Investors' Concerns.** The TMP investors indicated that the Depot once favored the TMP, then reversed that position. Specifically, the investors provided documentation that said, in part:

Although the Army decided not to appeal the State of Nevada's grant of permit and initially agreed to act as a cooperating agency . . . the Army abruptly reversed its position. . . .

The investors implied that the Army once favored the project because the Army did not appeal the State of Nevada's grant of permit, and the Army agreed to act as a cooperating agency. During interviews with the investors, they also alleged that the September 15, 1993 letter of the Depot General Counsel was the first time that the Depot openly opposed the project.

**Appeal of Nevada State Engineer Decision.** We interviewed the individual who served as the General Counsel for the Depot from June 1989 to December 1996. He stated that the Depot's decision not to be a party to the appeal of the Engineer's approval of inter-basin and intra-basin transfer permits did not indicate agreement with the decision. Instead, the appeal was not joined because, in the opinion of the General Counsel, the other appellants were already addressing the public interest.

**Cooperating Agencies.** Title 40, Code of Federal Regulations, includes regulations for the implementation of the NEPA. In accordance with those regulations, the preparation of an EIS requires the designation of a lead agency that will have primary responsibility for supervising the preparation of the EIS. Because the BLM manages the Federal land over which the pipeline would cross (Bedell Flat), the BLM was established as lead agency for the Bedell Flat EIS for the TMP. NEPA, as codified in United States Code, title 42, section 4332, requires cooperation and consultation with other Federal agencies. Title 40, Code of Federal Regulations provides for the designation of cooperating agencies. A cooperating agency is any Federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal or project. Although Federal agencies are required to consult with other agencies in determining whether an EIS is required for certain projects, that does not mean the lead agency should or does base its decisions solely on the comments of the other agencies. A thorough discussion

of these responsibilities is presented in Appendix D. For the Bedell Flat EIS, the BLM named the Depot as one of six cooperating agencies.

The participation of a Government organization or department as a cooperating agency does not necessarily imply an endorsement by that agency of the project being studied. Early in the development of the EIS, a Depot representative expressed concern that such an inference could take place. On October 22, 1992, the Depot's General Counsel addressed this point to the BLM Bedell Flat EIS Project Manager while commenting on the August 1992 preliminary draft EIS. In that correspondence, the General Counsel expressed concern that the draft EIS ". . . may, at this time, reflect a level of support for this project that we do not have." The General Counsel also asked that the preliminary draft EIS include "language indicating that our participation does not necessarily equate to our endorsement . . . ." The subsequent draft EIS, dated May 1993, specifically states that the participation of cooperating agencies does not necessarily imply endorsement of the proposed action.

**Alleged Opposition to the TMP.** Representatives of the Depot insist that neither the Depot nor the Army has opposed the goal of the TMP. Instead, Depot personnel have consistently asked for a reliable assessment of impact of any water project on the Depot's mission. Based on a review of correspondence issued and received by the Depot, the Depot position concerning this project appears consistent. In addition, there is no indication that the Army opposed the goal of the TMP, which was to increase the water supply of the Reno-Sparks, Nevada, metropolitan area thus allowing for expanded growth. Any reservation expressed by the Army was an attempt to clarify the impact of the TMP on the Depot's mission.

**Misinterpretation of Army Position.** The official position of the Army and the Depot on the TMP has been misinterpreted by the TMP investors and BLM representatives as well. For example, on December 3, 1992, the General Counsel for the Depot corresponded with the BLM Bedell Flat EIS project manager and commented on the preliminary draft EIS. (A copy of this correspondence is provided in Appendix L.) The General Counsel stated "The groundwater model as it currently exists . . . can be of use in public review and decision making." The correspondence provided a series of reservations associated with some of the assumptions and uncertainties incorporated in the model. When we discussed this letter with BLM representatives in December 1996, they insisted the letter articulated Army agreement with the model. As a result, the BLM representatives were surprised when the Army later stated that the model was not accurate.

On November 4, 1992, BLM Bedell Flat EIS project manager discussed the Depot's position on a related hydrology model with the Depot General Counsel. The project manager's memorandum of the conversation (see Appendix M) states that the Depot concluded the model "was acceptable." To ensure accuracy, the BLM provided that memorandum to the Depot General Counsel for review. The November 19, 1992, return letter from the Depot General Counsel (see Appendix N), states that "the model is not adequate."

**Allegation Summary.** The TMP investors alleged that the Army changed its position on the permits and applications to develop water rights. Specifically, the TMP investors imply that the Army once favored the project because (a) the Army did not appeal the State of Nevada's grant of permit, and (b) the Army agreed to act as a cooperating agency. The allegations were not substantiated. The evaluation determined that:

- o the decision not to be a party to the appeal of the Nevada State Engineer's approval of inter-basin and intra-basin transfer permits did not indicate agreement with the decision or agreement with the TMP, and
- o the decision, by Depot representatives, to act as a cooperating agency did not necessarily imply an endorsement of the TMP.

## Media Coverage of the Issues

**Allegation 3:** The Army conducted a media campaign to turn the public against the TMP.

**Evaluation Results.** This evaluation did not substantiate the allegation that the Army conducted a media campaign against the TMP. The evaluation showed that the California and Nevada media coverage of the TMP was extensive. The articles mentioned many parties and various issues both for and against the TMP. The Army's disclosure of contamination on the Depot was just one of the issues the media covered.

**Basis for Allegation.** The investors based this allegation on articles that appeared in the local media between the time the BLM issued the draft EIS in May 1993 through March 1994 when the Secretary of the Interior suspended the EIS process. Those articles covered such subjects as the release of the draft EIS for comment in May 1993, the discovery of TCE at the Depot, the BLM public hearings, and the September 1993 comments of the Depot General Counsel on the draft EIS.

**Coverage of Draft EIS Release.** The BLM released the Bedell Flat draft EIS for public review and comment in May 1993. The newspapers published several articles which provided a summary of the issues raised in the draft EIS. The issues discussed included concerns about poor groundwater modeling, wetlands degradation, Depot contamination, and the high cost of the project, as well as other concerns.

**Coverage of TCE Discovery.** On May 25, 1993, coincidental to the BLM release of the Bedell Flat draft EIS, the Depot's public affairs officer issued a press release to the media in Susanville, California and Reno, Nevada. The press release stated that TCE had been identified in on-post monitoring wells and that off-post monitoring wells would be installed to determine whether the contamination was migrating off the Depot. The Reno Gazette-Journal and

## Evaluation Results

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Lassen County Times published this information on June 5, 1993 and June 8, 1993, respectively. The articles appeared prior to the public hearings on the draft EIS.

**Coverage of BLM Public Hearings.** The BLM conducted public hearings on the draft EIS in Reno, Nevada on June 23, 1993 and in Susanville, California on June 24, 1993. The hearings provided the BLM and cooperating agencies with information to help evaluate the adequacy of the draft EIS and the suitability of the proposed TMP. Many individuals spoke at the hearings and raised a number of issues. A discussion of Depot contamination was one of the issues. The media reported on the issues raised during the hearings.

**Coverage of Depot General Counsel Comments.** On September 15, 1993, the Depot General Counsel addressed a letter to the BLM commenting on the Bedell Flat draft EIS. The letter, critical of the draft EIS, stated that the EIS did not credibly answer concerns about potential effects of the TMP on the Depot. The General Counsel urged the BLM not to allow the TMP to continue until the effects of the project on the Depot could be shown with some certainty. The General Counsel transmitted a facsimile of the letter to the Lassen County Planning Department for review because monitoring wells would be established within Lassen County. The Lassen County office, in turn, provided a copy to the Reno Gazette-Journal. On September 17, 1993 the Reno Gazette-Journal published an article titled "Army Rips 3-year study of project." The article criticized the EIS and incorporated some of the General Counsel's comments. The article also went on to discuss EIS issues not directly related to the Depot.

**Alleged Media War Against TMP.** The investors alleged that the Depot "launched a media war, playing on public fears of a contaminated groundwater supply." Specifically, the investors alleged that negative media coverage intended to destroy public confidence in the TMP was caused by the Depot public affairs officer's release of information concerning Depot TCE contamination in May 1993, the discussion of that contamination in the June 1993 public hearings, and the Depot General Counsel's September 1993 release of comments criticizing the EIS.

**Reason for TCE Disclosure.** In May 1993, the Depot public affairs officer notified the local media of the TCE plume discovery. The purpose of that press release was to notify the public that the Army identified TCE in on-post monitoring wells. The press release also stated that the Army would be installing off-post monitoring wells to determine whether the contamination was moving off the Depot. Depot officials did not immediately inform Nevada authorities because Depot personnel did not believe that the plume would impact the State of Nevada. As presented in the discussion of Allegation 1, this belief was shared by the California Regional Water Quality Control Board - Lahonton Region.

**Comments at BLM Public Hearings.** A review of the transcripts of the June 23 & June 24, 1993, hearings provided by the TMP investors showed that many individuals spoke at the hearings and a number of

issues were raised. The transcripts indicated that contamination at the Depot was discussed in these venues, along with a variety of other issues. For example, speakers addressed such topics as the effect of the TMP on area wetlands and the cost of the TMP, as well as the extent of contamination under the Depot and the potential migration of that contamination. The majority of the speakers commented against proceeding with the TMP and criticized the EIS for not adequately addressing environmental concerns. The transcripts of those hearings showed that the majority of the speakers commented against proceeding with the TMP, and criticized the EIS for not adequately addressing environmental concerns. Only two of the more than forty speakers commented in favor of proceeding with the TMP. The media then reported on the issues raised during the hearings which included that of Depot contamination.

**Comments Released to Media.** The comments of the Depot General Counsel concerning the draft EIS were reported in the media on September 17, 1993. The BLM received the General Counsel's letter on September 21, 1993, four days after the Reno Gazette-Journal article. The General Counsel explained that he transmitted a facsimile of the letter to Lassen County for their review and that Lassen County released it to the media.

**Allegation Summary.** The TMP investors alleged that the Army conducted a media campaign to turn the public against the TMP. This allegation was based on news articles that discussed the discovery of a TCE plume at the Depot, the BLM public hearings, and the Depot comments on the draft EIS. The investors were also concerned because the Depot comments on the draft EIS were prematurely provided to the media by a third party (Lassen County).

The evaluation included a review of more than 120 newspaper articles from the California and Nevada area, and a review of transcripts of public hearings on the TMP. The evaluation also included discussions with personnel at the Depot public affairs office and a review of related documents. Finally, we also reviewed all documentation provided by the investors. The evaluation did not support the allegation that the Army conducted a negative media campaign. Rather, the evaluation provided the following results.

- o The discovery of the TCE plume at the Depot was coincidental to the publication of the draft EIS in May 1993.
- o The public hearings of June 23 and 24, 1993 included a discussion of Depot contamination, but only as one of several issues.
- o The comments provided by the Depot General Counsel concerning the draft EIS were in accordance with the responsibilities assigned to a cooperating agency. The premature release of the Depot comments to the media was accomplished by a third party (Lassen County).

### Finalization of EIS

#### **Allegation 4: The Army opposed the TMP and blocked finalization of the EIS.**

**Evaluation Results.** The allegation was partially substantiated. The Army sought to ensure that the Bedell Flat EIS accurately addressed the impact of the TMP on the Depot's potable water supply and contamination cleanup efforts. The Army concerns were one of three issues which contributed to the Secretary of the Interior decision to suspend the EIS process. The Army actions were in accordance with the required decision-making process for a major action by a Federal agency.

**History of Bedell Flat EIS.** An integral part of the TMP was to construct a pipeline, over land owned by the Federal Government and managed by the BLM (Bedell Flat), to carry water from the Honey Valley Basin and the Fish Spring Ranch to the northern Reno-Sparks Nevada area. Because the pipeline would be constructed over public land, the investors required a right-of-way permit from the BLM to construct the pipeline.

**Requirement for EIS.** As codified in United States Code, title 42, section 4332, the NEPA required Federal agency decision-makers to consider the environmental impact of proposed major Federal actions that significantly affect the quality of the human environment. NEPA, codified in United States Code, title 42, section 4321 et seq., and the implementing Code of Federal Regulation provisions, set out a specific decision-making process that Federal agencies must follow to determine the impact of the proposed major action. Generally, until an agency completes its NEPA review, work on a proposed action cannot be initiated. As a result of NEPA requirements, the potential environmental impact of the Bedell Flat pipeline required examination. Appendix D provides further discussion of NEPA requirements.

**Evaluation of the Bedell Flat EIS.** On June 18, 1990, the BLM issued a "Notice of Intent to Prepare an Environmental Document" on the proposed TMP. Based upon response to that notice and issues raised during the scoping meeting, the BLM directed the investors to fund an EIS to evaluate the potential consequences of the proposed actions. A Notice of Intent to prepare an EIS was placed in the Federal Register and local newspapers on July 24, 1990.

**Issuance of the EIS.** As discussed in Appendix D, the BLM assumed the role as the lead agency. Moreover, the BLM designated the Depot as one of six cooperating Federal agencies. Under the NEPA guidelines, the BLM distributed the preliminary draft EIS to the cooperating Federal agencies for their comments in August 1992. Army comments on the preliminary draft EIS questioned the accuracy of the groundwater model and the potential impact of the TMP on the Depot. The BLM reviewed the cooperating agencies' comments in anticipation of publishing a draft EIS for public comment.

The Nevada State Director for the BLM issued the draft EIS for public review and comment in May 1993. The BLM received comments from the public and the cooperating agencies. The BLM project manager for the Bedell Flat EIS said that, although a formal analysis of comments was not performed by the BLM, most comments received were against proceeding with the TMP. Moreover, those comments criticized the EIS for not adequately addressing environmental concerns. Specifically, the comments cited concerns about poor groundwater modeling, wetlands degradation, Depot contamination, the high cost of the TMP, area growth, and other concerns. The General Counsel for the Depot expressed the Army's concerns in a September 1993 letter to the BLM. The letter stated that the draft EIS did not credibly answer concerns about potential effects of the TMP on the Depot. The BLM proceeded to address the comments on the draft EIS in preparation for the issuance of a final document. This work continued until March 1994.

**Suspension of the Environmental Impact Statement.** In March 1994, after reviewing the issues raised by various parties during the NEPA process, the Secretary of the Interior signed a memorandum that directed the BLM to suspend work on the draft EIS. The memorandum stated that the issues related to groundwater modeling, Depot groundwater contamination, and Pyramid Lake Reservation trust responsibilities precluded granting the right-of-way permits, even if the EIS was completed. The Secretary directed the BLM to suspend work on the EIS until these three issues were resolved with the concurrence of the USGS (on regional groundwater modeling issues), the Department of the Army (on Depot groundwater issues) and the Bureau of Indian Affairs (on Pyramid Lake Reservation trust responsibility issues). The Secretary further directed, if that was accomplished, the NEPA process could be restarted. A copy of the Secretary's memorandum suspending the EIS is in Appendix O.

The Secretary of the Interior based his decision to suspend the EIS partly on an option paper that addressed the status of the right-of-way application for the TMP. The option paper, prepared by the Department of the Interior Acting Director for Policy and Analysis, cited issues on which the TMP was being contested. Among the issues raised were uncertainties related to the EIS groundwater modelling, effects related to the Depot, and effects related to the Pyramid Lake Reservation.

**Allegation of Army Opposition.** The TMP investors alleged that the Army opposed the development of the TMP at every level. Further, the investors alleged that the Army blocked the process for finalizing the EIS. Specifically, the investors alleged that, "But for the Army's conduct [the] BLM would have granted the Federal right-of-way and there would have been no impediments to the Project's completion."

**Army Position.** The Army's concerns regarding the TMP consisted of ensuring that the Bedell Flat EIS accurately addressed the impacts of the TMP on the Depot's potable water supply and the Depot's contamination cleanup efforts. The Army's position was that more information was needed to accurately assess those impacts before a responsible decision could be made to grant the pipeline permit.

**Suspension of the EIS.** The evaluation partially substantiated the investors' allegation that Army concerns over the TMP contributed to the suspension of the EIS. The Acting Director of Policy and Analysis, Department of the Interior, explained that the Department of the Interior, not the Army, suspended the Bedell Flat draft EIS. The Secretary of the Interior suspended the EIS based on at least three issues with the concerns of the Army representing just one issue. The Acting Director of Policy and Analysis also stated that the Native American environmental concerns alone were of such significance that, had the Army not raised their concerns regarding the potential impact on the Depot, the recommendation to the Secretary would still have been to suspend the EIS process.

**Allegation Summary.** The TMP investors alleged that the Army opposed the TMP and blocked finalization of the EIS. The allegation was partially substantiated. The evaluation determined the following.

- o The Army consistently believed that more information on the potential impacts on the Depot from the TMP was required.
- o The Army did comment on the EIS. However, the decision to suspend the EIS process was made by the Secretary of the Interior, not the Army.

## Evaluation Summary

The Congress requested the Inspector General, DoD to recommend a process for determining fair compensation to the private investors if deemed appropriate. Based on the results of this evaluation, we concluded that the Army has not acted in a negligent or unfair manner. Therefore, we are not recommending a process for determining fair compensation to the private investors.

## **Part II - Additional Information**

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## Appendix A. Evaluation Process

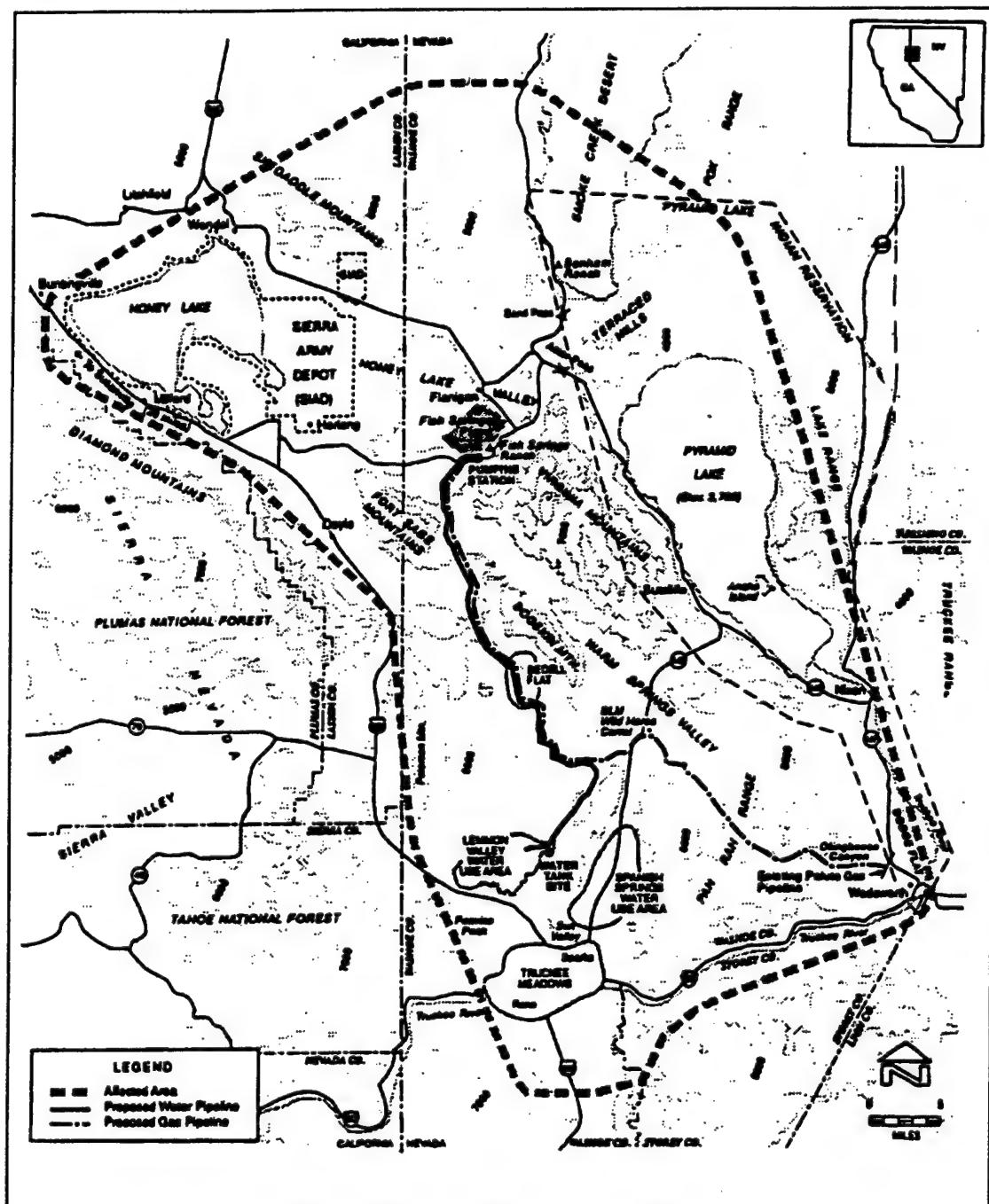
### Scope and Methodology

To accomplish the evaluation objectives, we reviewed documentation associated with the Depot Installation Remediation Program as well as documentation related to the TMP. The documentation reviewed covered the period from 1979 to 1996. Our sources of information included the Army, the Department of the Interior, the U.S. Environmental Protection Agency, the TMP investors, and other Federal, state, local, and private organizations. We also interviewed current and former officials associated with those efforts.

**Evaluation Period, Standards, and Locations.** We performed this evaluation from November 1996 through February 1997 in accordance with standards issued by the Inspector General, DoD. We did not rely on computer processed data or statistical sampling procedures. We visited or contacted TMP investors as well as individuals and organizations within the DoD, the Department of the Interior, local governments in the States of Nevada and California, and various State of Nevada and State of California agencies. Further details are available upon request.

**Management Controls.** We did not evaluate the management control program because the Congressional tasking did not entail such coverage and because we found no indication of inappropriate actions by the Army.

## Appendix B. Area Map



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## Appendix C. Background on the TMP

The Truckee Meadows Project (TMP) is a joint venture between two Nevada corporations: Western Water Development Company, Inc. (Western Water), and Hawthorne-Nevada, Inc. Pursuant to an option agreement dated April 12, 1988, between Northwest Nevada Water Resources Limited Partnership (Resources), a Nevada limited partnership, and the County of Washoe, a political subdivision of the State of Nevada, Washoe County obtained from Resources, among other things, the option to acquire certain water rights and related assets located at the east end of Honey Lake Valley, Washoe County, Nevada, at a site commonly known as Fish Springs Ranch about 35 miles north of Reno, Nevada. Fish Springs Ranch was a Nevada limited partnership until May 14, 1991, when its partnership status was permanently revoked. On August 8, 1988, Resources changed its name to Western Water Development Company, Inc.

In a purchase agreement dated August 23, 1988, between Western Water and Washoe County, Western Water agreed to provide Washoe County with certain services regarding the development, design and construction of a water importation system. The purpose of that system was to extract water from Fish Springs Ranch and to deliver the water through a pipeline to the Reno-Sparks area for municipal and industrial use.

In a joint venture agreement dated December 12, 1988, Western Water and Hawthorne-Nevada joined together in a joint venture to undertake the TMP. Western Water assigned all its rights in the August 23, 1988, purchase agreement to the joint venture; and Hawthorne-Nevada, Inc. agreed to make funds available to the Joint Venture for the project. Both companies are debtors of Hawthorne Associates, a company in Pittsburgh, Pennsylvania, the secured-party who holds liens filed with the Nevada Secretary of State.

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## Appendix D. Environmental Impact

The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321 et seq., as implemented by Executive Orders 11514 and 11991 and the Council on Environmental Quality (CEQ) Regulations of November 29, 1978 (43 Federal Register 55978) requires that the decision-making processes of Federal agencies include appropriate and careful consideration of the environmental effects of proposed actions, an analysis of the potential environmental effects of proposed actions and their alternatives for public understanding and scrutiny, to avoid or minimize adverse effects of proposed actions and to restore and enhance environmental quality as much as possible.

**NEPA Requirements.** In every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, NEPA requires a detailed statement on:

- o the environmental impact of the proposed action,
- o any adverse environment impacts which cannot be avoided should the proposal be implemented,
- o alternatives to the proposed actions,
- o the relationship between local short-term uses of the human environment and the maintenance and enhancement of long-term productivity, and
- o any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Pursuant to title V, Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761-1771) as implemented in 43 C.F.R. Part 2800, the Secretary of the Interior has the authority to grant or deny rights-of-way and permits over, upon, under, or through public lands to any qualified individual, business entity or Government entity; and to regulate control and direct the use of such rights-of-way on public land so as to:

- o protect the natural resources associated with public lands and adjacent private or other lands administered by a Government agency,
- o prevent unnecessary or undue environmental damage to lands and resources,
- o promote the utilization of rights-of-way in common with respect to engineering and technological compatibility, national security and land use plans, and
- o coordinate, to the fullest extent possible, all actions taken pursuant to this part [43 C.F.R. 2800] with State and local governments, interested individuals and appropriate quasi-public entities.

## Appendix D. Environmental Impact

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For the TMP, the investors proposed constructing a pipeline across Federal land (known as Bedell Flat) to carry water from the pumping well sites, in the area of Fish Springs Ranch, Nevada, to the Reno-Sparks Metropolitan area. That pipeline could not be constructed without the issuance of a Federal right-of-way permit by the Department of the Interior's Bureau of Land Management (BLM). The BLM, in turn, required the investors to fund the preparation of an environmental impact statement (EIS) to assess the environmental effects of the proposed BLM action.

The funding requirement was entirely consistent with the cost reimbursement requirement in 43 C.F.R. 2883.1-1(a)(1). This provision requires an applicant for a right-of-way grant or a temporary use permit to reimburse the United States for administrative and other costs incurred by the United States in processing the application, including the preparation of reports and statements pursuant to NEPA, prior to the United States having incurred such costs. All costs must be paid before the right-of-way or temporary use permit can be issued.

For the Bedell Flat EIS, the BLM assumed the role of the lead agency. The term "lead agency" refers to the agency that has primary responsibility for managing the preparation of the EIS, determining the impact of the action, and deciding whether to proceed with the proposed action.

The BLM designated six cooperating agencies for the TMP EIS process. The term "cooperating agency" means any Federal agency which has jurisdiction (by law or special expertise) with respect to environmental impacts of a proposal or project that can significantly affect the quality of the human environment. The six designated cooperating agencies were:

U.S. Department of the Interior,  
Fish and Wildlife Service

U.S. Department of the Interior,  
Bureau of Indian Affairs

U.S. Department of the Interior,  
Geological Survey

U.S. Environmental Protection Agency

U.S. Army, Sierra Army Depot

Pyramid Lake Paiute Tribe

**Endorsement of Cooperating Agency.** The participation of a Government organization or department as a cooperating agency does not necessarily imply an endorsement by that agency of the project being analyzed for environmental impact.

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## Appendix E. Installation Restoration Program

**The Installation Restoration Process.** This is a deliberate process used to identify, evaluate and remediate contamination at current or formerly used defense sites. During the Installation Restoration Process, the DoD is required to adhere to the procedures established in the Environmental Protection Agency National Oil and Hazardous Substances Pollution Contingency Plan (Title 40, Code of Federal Regulations, Part 300), commonly referred to as the NCP. Various DoD sites have taken an average of almost 7 years to put a remedy in place.

Army Regulation 200-1, Environmental Protection and Enhancement, April 23, 1990, outlines the restoration process for Army facilities. In all environmental restoration actions, Army facilities must perform a preliminary assessment, and a remedial investigation leading to a Record of Decision. A removal action may also be undertaken.

**Preliminary Assessment/Site Inspection.** The purpose of this step is to identify potential sources of contamination and indicate possible endangerment to public health, safety, and welfare, and the natural environment.

**Remedial Investigation/Feasibility Study.** This process may involve comprehensive studies of the acreage and structures. The difference between this and the preliminary assessment/site inspection report may suggest that it is necessary to characterize the nature and extent of potential contaminants. Alternatives for site cleanup are also identified.

**Record of Decision.** After the publication of the feasibility study report, a Record of Decision is prepared according to U.S. Environmental Protection Agency guidelines. The Record of Decision is signed by both State and DoD representatives and documents actions to be taken to remediate the site.

**Removal Action and Interim Remedial Action.** Before the initiation and/or completion of the remedial investigation/feasibility study and the selection of a permanent remedy in the Record of Decision, a removal action may be undertaken if it would be cost-effective and consistent with the anticipated permanent remedy.

At each step in the process, the DoD installations are normally required to obtain regulatory agency review, and approval. Further, they must advise the public of their planned actions and periodically invite public comment.

**Depot Remediation Process.** The remediation process at the Depot began with a preliminary assessment/site inspection in 1979. That review, performed under the auspices of the U.S. Army Toxic and Hazardous Materials Agency identified 34 potential hazardous waste sites. A follow-up study by that same agency was performed in 1983.

## Appendix E. Installation Restoration Program

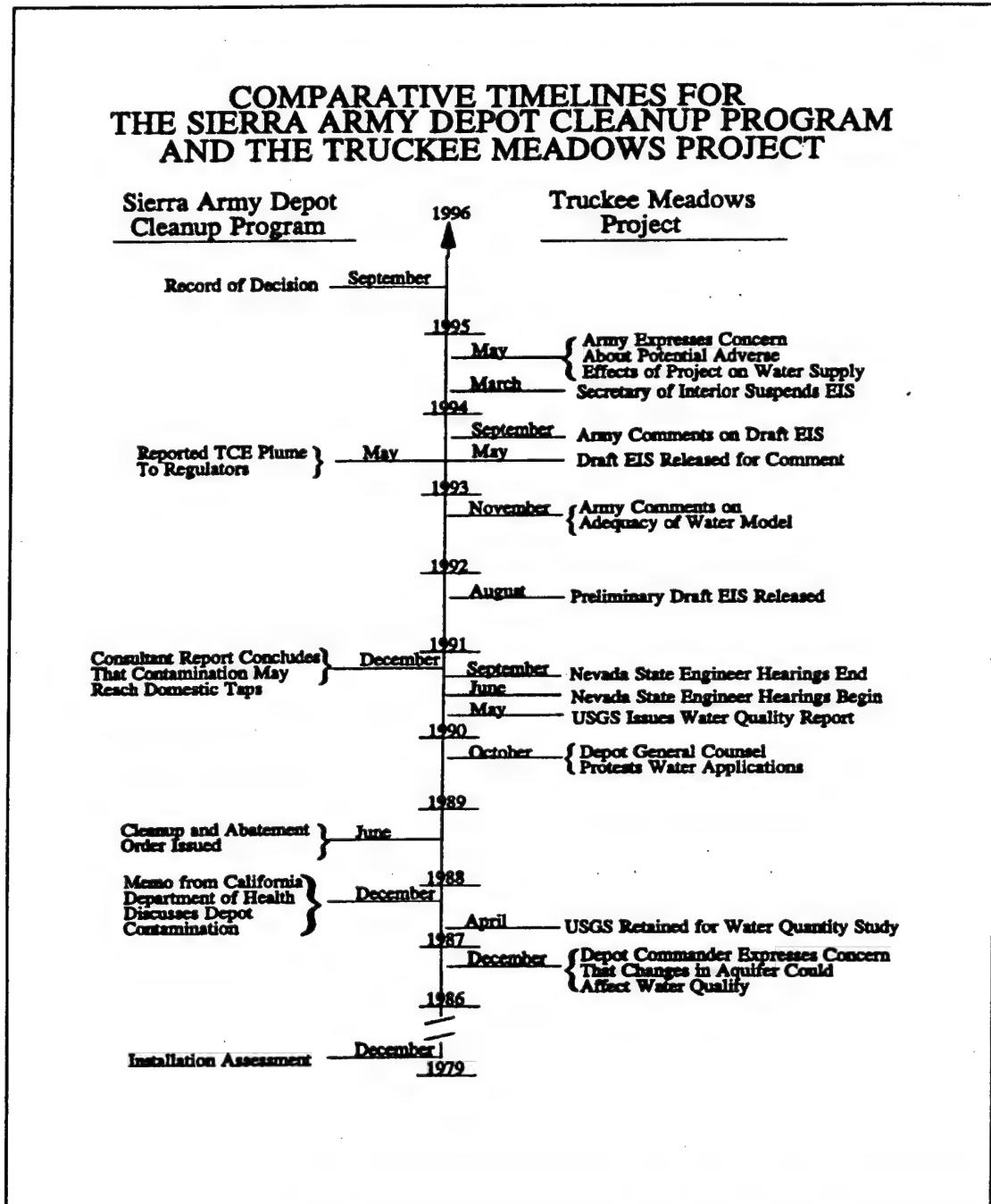
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Based on the results of those studies, the Depot initiated a remedial investigation/feasibility study in 1989. That study was divided into three phases starting as follows:

<u>Phase</u>	<u>Year Started</u>
I	1989
II	1990
III	1992

As the result of those studies, the Depot has published a series of Records of Decision concerning individual sites. These include Records of Decision dated September 1995 and October 1996. According to U.S. Environmental Protection Agency data, the average duration of an Environmental Protection Agency cleanup project from remedial investigation/feasibility study start to remedial action completion is more than ten years.

## Appendix F. Comparative Timeline



# Appendix G. California Regional Water Quality Control Board Letter, August 11, 1993

STATE OF CALIFORNIA

PETE WILSON, Governor

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—

### LAHONTAN REGION

1000 LAKESIDE DRIVE  
REED LAKE TANDEM, CALIFORNIA 95110  
(707) 544-3301 FAX (707) 544-3371



August 11, 1993

L.H. Dodgion  
Administrator  
Nevada Division of Environmental Protection  
Capitol Complex  
333 W. Nye Lane  
Carson City, Nevada 89710

### DISCOVERY OF BUILDING 210 TCE CONTAMINATED GROUND WATER AT THE SIERRA ARMY DEPOT, HERLONG

Dear Mr. Dodgion:

In reference to your letter of June 15, 1993 we have examined the issue of your office's notification concerning the above-referenced ground water contamination. Dr. Gill's subsequent phone call to you related much of our position on this matter; however, as promised, we are sending this written response. While we understand your concern in this matter, we believe that you may have misunderstood the contamination situations which exist at the Sierra Army Depot (SIAD). The following information should clarify this situation.

#### GROUND WATER CONTAMINATIONS:

We are extremely sensitive to Nevada's informational needs regarding ground water contamination which may impact it's water quality. However, based on current hydrogeological conditions we believe that neither the previously identified contaminations, nor the recently publicized TCE plume present an eminent threat to Nevada water quality interests. The specific reasons for this position are as follows:

1. There is five miles separating SIAD from the Nevada state line with the ground water flowing away from Nevada, towards Honey Lake.
2. There is twelve miles separating SIAD from Fish Springs Ranch with the ground water flowing away from Nevada in a northwesterly direction towards Honey Lake. There have been preliminary indications that flow directions at the Building 210 area may be more easterly. These indications, however, are preliminary and may be reflecting only local anomalies.
3. At a previously discovered TCE site, the ground water gradients combined with contaminant retardation factors have resulted in contaminant flow rates of less than ten feet/year. Until further data is available, we do not expect significantly different flow rates at Building 210.

Appendix G. California Regional Water Quality Control Board Letter,  
August 11, 1993

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L.H. Dodges

-3-

As the previous contaminations, including TCE plumes, were referenced in the Draft Environmental Impact Statement (DEIS), we understand that you have been informed of them.

We do have considerable concerns regarding the potential impacts of Washoe County's proposed ground water pumping on SIAD and California ground and surface waters, these concerns will be addressed in our comments to the Draft EIS. A copy of these comments will be forwarded to your office.

As you can see, we have been true to our commitment to inform your office of any contaminant situations posing an eminent threat to Nevada water quality. If you have any additional comments or questions concerning this matter, please contact David Himebaugh, our project manager for SIAD, or Dr. Ranjit Gill, his supervisor.

Sincerely,



HAROLD J. SINGER  
EXECUTIVE OFFICER

cc: Sierra Army Depot Mailing List (enclosed)

DGH/sh

# Appendix H. U.S. Army Materiel Command Letter, April 29, 1991



DEPARTMENT OF THE ARMY  
HEADQUARTERS, U. S. ARMY MATERIEL COMMAND  
2801 GREENHOWER AVENUE, ALEXANDRIA, VA 22323-0001

AMCEN-A (200-1a)

29 APR 1991

MEMORANDUM THRU HQDA, Army Environmental Office, ATTN: ENVR-E,  
Washington, D.C. 20310-2600

FOR Mr. Lewis D. Walker, Deputy Assistant Secretary of the Army  
(Environment, Safety and Occupational Health), Office of  
the Assistant Secretary of the Army (Installations,  
Logistics and Environment), Washington, D.C. 20310-0103

SUBJECT: Sierra Army Depot Participation in Honey Lake Valley  
Ground Water Basin Management Agreement

1. Reference Memorandum, Deputy Assistant Secretary of the Army,  
2 Apr 91, SAB.
2. IAW reference 1, the draft response letter is forwarded as an  
enclosure.
3. While a satisfactory monitoring program could protect the  
Army's interests, the program as currently proposed by Washoe  
County would not accomplish the goal. Sierra Army Depot (SIAD)  
and DA Environmental Law Division are currently collecting data  
which will allow the Department of Justice to assess the  
appropriateness of court action to protect the Depot's federal  
reserved water rights. Action of one sort or another is  
necessary because of the following concerns raised by the  
consultants hired by SIAD to review the project:
  - a. The withdrawal and exportation of 13,000 acre feet of  
ground water from the Fish Spring Ranch area of southeastern  
Honey Lake Valley Ground Water Basin will lower the water table  
at SIAD. This anticipated drawdown, over time, will change the  
ground water gradient from a relatively flat gradient to a  
recognizable slope and would cause a substantial change in the  
direction and velocity of ground water flow.
  - b. The change in direction and velocity of ground water  
flow may draw very high total dissolved solids (TDS) water into  
the SIAD water supply wells and may cause the quality of drinking  
water to drop below the EPA drinking water standards.
  - c. The anticipated drawdown of the area's water table may  
seriously damage phreatophytic (deep-rooted) vegetation along the  
Eastern boundary of SIAD. This vegetation is essential to the  
prevention of wind erosion.

AMCEN-A (200-1a)

SUBJECT: Sierra Army Depot Participation in Honey Lake Valley  
Ground Water Basin Management Agreement

d. The change in direction and velocity of ground water flow may cause hazardous/toxic constituents from beneath the SIAD to be drawn south-easterly toward the Depot's water wells as well as toward the production wells at Fish Spring Ranch and may eventually appear at the domestic water tap at Reno-Sparks area. (Note: This issue was not presented during the hearing).

e. Among other consequences of this change in ground water gradient would be rendering useless the existing Remedial Investigation/Feasibility Study (RI/FS) work accomplished to date by USATHAMA and may cause extended delays in RI/FS work until the ground water gradient stabilized.

4. The Army's position relating to the subject request is not to participate with the proposed ground water monitoring program. The Army's alternative to non-participation is to offer a counterproposal that will satisfy SIAD's concerns.

5. The recommended reply has been coordinated with SIAD, HQDESCOM and AMC Command Counsel. The reply to Mr. MacIntyre's letter is intended to allow pursuit of above options without limiting the Army's future course of action if an agreement cannot be reached.

6. The point of contact for this action is Mr. Pete Cunanan, (703) 274-9273.

FOR THE COMMANDER:

Encl

  
JOSEPH McGuire  
COLONEL, USA  
Deputy Chief of Staff for  
Engineering, Housing,  
Environment, and Installation  
Logistics

CC:  
CDR, DESCOM, ATTN: AMSDS-EN-FD (MR. T. TOPLISER),  
CHAMBERSBURG, PA 17201-4170  
CDR, SIERRA ARMY DEPOT, ATTN: SDSSI-JA (CPT D. CULVER)/  
SDSSI-ENV (MR. J. RYAN), HERLONG, CA 96113-5210  
CDR, AMC, ATTN: AMCCS, AMCCC-G

2

# Appendix I. Depot Director of Engineering and Housing Letter, August 20, 1990



REPLY TO  
COMM-FWD-001

DEPARTMENT OF THE ARMY  
SIERRA ARMY DEPOT  
HERLONG, CALIFORNIA 96112

August 20, 1990

Mr. Mike Phillips  
1724  
Bureau of Land Management  
Carson City District Office  
1535 Hot Springs Road, Suite 300  
Carson City, Nevada 89706-0638

Director of Engineering  
and Housing

Mike Phillips  
Lahontan Resource Area  
Bureau of Land Management  
Carson City District Office  
1535 Hot Springs Road, Suite 300  
Carson City, Nevada 89706-0638

Dear Mr. Phillips:

Sierra Army Depot is in receipt of the Notice of Intent pertaining to the Truckee Meadows Project (NV-030-00-5101-09-XXXX).

Sierra Army Depot has several concerns pertaining to the direct and indirect impact of the Truckee Meadows Project on Sierra Army Depot and the surrounding area.

First, it appears that the amount of groundwater extraction and exportation from the Honey Lake Basin made possible by the proposed pipeline could lower existing groundwater levels in and around the Depot. This could lower production capacity of our wells significantly. These wells serve as the only source of potable water for the Depot.

This lowering of groundwater levels also threatens phreatophytic plant life on and around the Depot. In addition to adverse impact on the ecosystem of the area, loss of this ground cover could result in large-scale erosion of the fine sand and prehistoric lake sediments that cover the valley floor. This, in turn, raises the potential for air quality problems caused by blowing dust.

The quality, as well as the quantity of the water available to the Depot is jeopardized by pumping connected with the pipeline. Changes of existing gradient and flow lines could cause large bodies of non-potable groundwater to migrate into the Depot's potable supplies.

Large scale pumping of groundwater from the Honey Lake basin could have serious effects on the Army's efforts to clean up pollution under the Depot. Currently, a detailed study of groundwater pollution under the Depot is being conducted. Changes or reversals in gradient could disrupt the numerous monitoring wells on which this program depends. The resultant delays might cost substantial money and time.

Migration of water underground could also result in movement of existing contamination to a wide area off of the Depot.

If you have any questions, or wish any other assistance, please call Mr. Tracy P. Totten, our point of contact, at (916) 837-4414.

Sincerely,

*A. G. Riess*

A. G. Riess  
Director of Engineering and Housing

CC:

Alex Flangas, Esq., 50 West Liberty Street,  
Suite 630, Reno, Nevada 89501

George W. Benesch, Esq., 427 Ridge Street,  
P.O. Box 3197, Reno, Nevada 89505

Robert J. Golten, Esq., Fredericks & Pelcyger,  
1881 Ninth St., Suite 216, Boulder, Colorado 80302

William E. Isaaff, Esq., Chief Deputy City Attorney,  
City of Reno, P.O. Box 1900, Reno, Nevada 89505

# Appendix J. Depot Commander Letter, December 17, 1986



REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
SIERRA ARMY DEPOT  
HERLONG, CALIFORNIA

17 DEC 1986

Directorate of Engineering  
and Housing

State of Nevada  
Division of Water Resources  
ATTN: Peter G. Morros, State Engineer  
201 South Yall Street  
Carson City, NV 89710

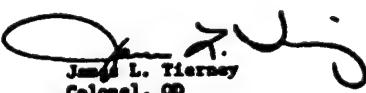
Dear Mr. Morros:

I recently learned that your office is evaluating a request to relocate four existing agricultural wells in the vicinity of Fish Springs Ranch in the Honey Lake Basin of Washoe County. The potential for an overdraft condition may exist, and it is in this regard that I am writing this letter.

A review of the geological data for this area indicates that there are two schools of thought, with a wide variance in the assumed recharge rate. Until that difference is resolved, I would urge caution from your office in the issuance of any new or changed permits which impact upon this aquifer. I would further urge your office to pursue additional studies, possibly conducted by the US Geological Survey, to once and for all define in detail this underground water resource in the Honey Lake Basin.

Sierra Army Depot has been a resident of the Basin for the past 45 years. The wells serving the Depot provide marginal quality water, and I am concerned that any change to the aquifer might further deteriorate the quality of the water available.

Sincerely,

  
James L. Tierney  
Colonel, OD  
Commanding

## **Appendix K. Department of the Army Letter, May 24, 1995**



DEPARTMENT OF THE ARMY  
OFFICE OF THE ASSISTANT SECRETARY  
INSTALLATIONS, LOGISTICS AND ENVIRONMENT  
118 ARMY PENTAGON  
WASHINGTON DC 20316-6118

May 1 1965

Mr. Gerald Grant  
Hill and Knowlton  
Public Affairs Worldwide Co.  
901 31st Street, N.W.  
Washington, D.C. 20007-3838

Dear Mr. Grant:

This letter is in response to your personal request of Mr. Robert M. Walker, that the Army review and comment on the document titled, A History of the Relationship Between Sierra Army Depot and Its Nevada Neighbors, and correspondence concerning the Sierra Army Depot (SIAD) and the Truckee Meadows Project (Project).

The Army's position on this matter remains unchanged from our January 12, 1994, memorandum to the Department of Interior (DOI), commenting on DOI's Draft Environmental Impact Statement related to the Project. The Army still believes that the water exportation proposed by the Project could have adverse effects on the water supply and groundwater contamination at SIAD.

I have requested that SIAD personnel contact representatives of the Project and offer to discuss what additional studies would help address our concerns over these possible impacts of the Project on SIAD. I continue to believe the SIAD representatives remain the most appropriate Army representatives for you to work with, given their professional responsibility for, familiarity with, and proximity to, the site. Mr. Culver and the other professionals at SIAD have my complete confidence and are in the best position to address any specific questions you may still have regarding SIAD and the potential impact of your Project on the water supply and groundwater contamination at SIAD. Accordingly, I urge that those interested or involved with the Project contact SIAD representatives with questions concerning this matter.

Thank you for your interest in this matter.

sincerely,

*Lewis D. Walker*  
Lewis D. Walker  
Deputy Assistant Secretary of the Army  
(Environment, Safety and Occupational Health)  
QASA(I, L&E)

## Appendix L. Depot General Counsel Letter, December 3, 1992

DEPARTMENT OF THE ARMY  
SIERRA ARMY DEPOT  
MEREDITH, CALIFORNIA

REPLY TO  
ATTENTION OF:

December 3, 1992

BUREAU OF LAND MANAGEMENT  
CARSON CITY DISTRICT OFFICE

Dec 4 2:35 PM '92

Legal Office

Mr. Dave Loomis  
Bureau of Land Management  
Carson City District Office  
1535 Hot Springs Road, Suite 300  
Carson City, Nevada 89706-0638

Mr. Loomis:

I am writing as you requested regarding our last correspondence to you about the description and use of the groundwater modeling in the EIS for the Truckee Meadows Project pipeline.

The groundwater modeling as it currently exists, we have agreed before, can be of use in public review and decision making. Its utility is limited by the assumptions and uncertainties incorporated in the model. The EIS already says that the accuracy of the modeling results is uncertain. The question that is never clearly presented or fully discussed in the EIS is: How uncertain? The discussion in Section 4.4.1.2 confidently discusses model results accurate to within a single acre foot per year, and water quality differences to a specificity of 1 part per million. In its conclusions about water quality impacts at SIAD at the bottom of page 4-39, the discussion concludes that there will be no impact on SIAD at all.

The lack of discussion about the scope of uncertainties and the great specificity of the model results are bound to spawn considerable confusion about the proper role of this model in evaluating alternatives. We believe the net effect is to lend the model a great deal more conclusory value than it actually possesses. If the limitations of this model as a predictive tool are appropriately clarified, we believe it can be an acceptable and useful component of the EIS. I still believe that the process described in 40 CFR 1502.22 (b) (1) would be a good means of accomplishing that goal. We also look forward to your review of our previous suggested changes as helping to deal with the problem.

- 2 -

We also discussed the monitoring plan that had been included as a appendix to the EIS. Since you are eliminating that appendix, the format of the suggested monitoring plan written by Mr. Montgomery includes some moot references. Just the same, it outlines a monitoring plan that we believe is an appropriate tool in mitigating the adverse effects of the TMP on our installation. A copy of the letter from Mr. Montgomery is enclosed.

The mitigation of adverse effects on the environment of Sierra Army Depot depends on early warning of a problem. This would allow us to defend our federal reserved or other water rights before they ceased to exist. It would allow for effective management of existing contaminated sites before the contamination spread as much as it might without early warning. It would give us the time to pursue alternative means of water supply, mitigate the effects of subsidence, and protect any plant or animal life threatened by the changing groundwater conditions caused by pumping.

If we can be of any assistance in this matter, please do not hesitate to call.

sincerely,

*Daniel A. Culver*  
Daniel A. Culver  
Depot Counsel

Enclosure

## **Appendix M. Conversation Record, November 4, 1992**

CONVERSATION RECORD			TIME	DATE
TYPE	<input type="checkbox"/> VISIT	<input type="checkbox"/> CONFERENCE	<input checked="" type="checkbox"/> TELEPHONE	11/4/93
Location of Visit/Conference:			<input checked="" type="checkbox"/> INCOMING	ROUTINES
NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU			<input type="checkbox"/> OUTGOING	NAME/SYMBOL
Dan Culver			Sierra Army Depot	Colver
SUBJECT			TELEPHONE NR:	
Bedell Flat PDES				
<p><b>SUMMARY</b></p> <p>Mr. Culver called regarding Sierra Army Depot comments on the Bedell Flat PDES and Hydrology Tech Report. He said that after consultation with Army + consultant experts, Sierra Army Depot had concluded that the hydrology impact modelling effort by WESTEC was acceptable and that varying the inputs regarding pumping at the depot would not change the model results. He then requested further documentation in the PIS regarding model assumptions. I agreed and asked him to send us the Army's conclusions and requests in writing.</p>				
<p><b>ACTION REQUIRED</b></p> <p>Send to Culver for initial and return.</p>				
NAME OF PERSON DOCUMENTING CONVERSATION		SIGNATURE	DATE	
David Loomis		David Loomis	4-5-92	
ACTION TAKEN				
SIGNATURE		TITLE	DATE	
FBI - D. C. 1980-61-700 00100 (40231) CONVERSATION REC'D.				
EXTRADITION FORM 272 (22-70)				

## Appendix N. Depot General Counsel Letter, November 19, 1992



DEPARTMENT OF THE ARMY  
BUREAU OF LAND MANAGEMENT  
CARSON CITY FIELD OFFICE SIERRA ARMY DEPOT  
HERLONG, CALIFORNIA  
21 NOV 1992

21 NOV 1992 November 19, 1992

Legal Office

Mr. Dave Loomis  
Bureau of Land Management  
1535 Hot Springs Road, Suite 300  
Carson City, Nevada 89706-0638

Dear Dave:

I got your request to make a written record of our November 4 conversation, and I am writing to respond to it. At the same time, I wanted to follow up on our request regarding the language in Section 4.4.1.2.

After talking the matter over with our consultants, we determined that correction of some of the values used in the model would not resolve our main misgivings about it. We continue to believe that the model is not an adequate underpinning for the decision maker's analysis of the effects of granting the permit. Even if some of the incorrect input to the model were corrected, the fundamental value of the model would not be increased. Since your organization has made it clear that extensive revamping of the model is not a viable option, we recognize that the model will be included in the EIS pretty much "as is." Nevertheless, I need to make it clear that Sierra Army Depot does not regard the hydrology impact modeling as acceptable.

That brings us to the main issue we wish you to consider. In order for this model to be of any use to a reviewer of this document, the limitations and assumptions in the model need to be explained in a summary form. As it currently exists, the report refers the reader to discussion of the assumptions and uncertainties in Appendix H. To the extent that these discussions exist at all, they consist of random references to portions of the model dispersed throughout that long appendix.

40 CFR 1502.22 (copy enclosed) provides clear guidance on how to deal with incomplete or unavailable information that is essential to a reasoned choice among alternatives. The EIS as it currently exists fails to meet the standard set by this regulation. The primary duty of the preparing agency is make clear that the information is lacking. A brief discussion of the

Appendix N. Depot General Counsel Letter, November 19, 1992

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- 2 -

assumptions and uncertainties in this model, in the EIS itself, is an essential part of meeting both the letter and intent of this standard. This discussion would best be written by the team preparing the model. In addition to conforming with the regulation, this step might avoid pointless argument about the limitations of the study later in the process.

If I can be of any assistance, please do not hesitate to call me at (916) 827-4548.

Sincerely,

  
Dennis A. Coffey  
Depot Counsel

Enclosure

# Appendix O. Secretary of the Interior Memorandum, March 29, 1994



THE SECRETARY OF THE INTERIOR  
WASHINGTON

MAR 29 1994

## Memorandum

To: Director, Bureau of Land Management  
Assistant Secretary - Land and Minerals Management

From: The Secretary *BB*

Subject: Right-Of-Way Processing for the Truckee Meadows Project

I have reviewed the December 1, 1993, options paper on the status of the Bureau of Land Management's (BLM) processing of right-of-way applications for the Truckee Meadows Project, as well as your joint comments and recommendations and those of the Assistant Secretary Indian Affairs, the position of the Department of the Army, and a modified edition of the options paper.

I find your position persuasive that issues related to groundwater modelling, Sierra Army Depot groundwater contamination, and Pyramid Lake Reservation trust responsibilities would preclude granting the right-of-way permits even if the Environmental Impact Statement (EIS) were completed. This position is basically consistent with that of the Assistant Secretary - Indian Affairs and the Department of the Army.

I therefore direct the BLM to suspend work on the EIS until these three issues are resolved with the concurrence of the U.S. Geological Survey (on regional groundwater modelling), the Department of the Army (on Sierra Army Depot groundwater issues) and the Bureau of Indian Affairs (on Pyramid Lake Reservation trust responsibility issues). If and when that is accomplished, the National Environmental Policy Act process can be restarted.

Please advise the parties involved of this course of action.

cc: Solicitor  
Assistant Secretary - Indian Affairs  
Deputy Director, Office of Policy Analysis

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## **Appendix P. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense (Comptroller)  
Deputy Chief Financial Officer  
Deputy Comptroller (Program/Budget)  
Assistant Secretary of Defense (Public Affairs)  
Deputy Under Secretary of Defense for Environmental Security  
Director, Defense Logistics Studies Information Exchange

### **Department of the Army**

Assistant Secretary of the Army (Installation, Logistics and Environment)  
Office of the Assistant Chief of Staff for Installation Management  
Commander, Army Environmental Center  
Auditor General, Department of the Army  
Commander, Army Materiel Command  
Commander, Industrial Operations Command  
Commander, Sierra Army Depot

### **Department of the Navy**

Assistant Secretary of the Navy (Financial Management and Comptroller)  
Auditor General, Department of the Navy

### **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Auditor General, Department of the Air Force

### **Other Defense Organizations**

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Director, National Security Agency  
Inspector General, National Security Agency  
Inspector General, Defense Intelligence Agency

## **Non-Defense Federal Organizations and Individuals**

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Technical Information Center, National Security and International Affairs Division,  
General Accounting Office  
Secretary of the Interior  
U.S. Geological Survey  
Bureau of Land Management  
U.S. Environmental Protection Agency

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on National Security, Committee on Appropriations  
House Committee on Government Reform and Oversight  
House Subcommittee on Government Management, Information and Technology,  
Committee on Government Reform and Oversight  
House Subcommittee on National Security, International Affairs, and Criminal  
Justice, Committee on Government Reform and Oversight  
House Committee on National Security

## **Audit Team Members**

**This report was prepared by the Contract Management Directorate, Office  
of the Assistant Inspector General for Auditing, DoD.**

**Paul J. Granetto  
William C. Gallagher  
Harold E. Lindenhofen  
Douglas P. Neville  
John G. LaBelle  
MAJ Jeffrey S. Ogden, USA  
Maryjane R. Jackson**

## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title:** Evaluation of Sierra Army Depot Groundwater Contamination

**B. DATE Report Downloaded From the Internet:** 10/22/99

**C. Report's Point of Contact:** (Name, Organization, Address, Office Symbol, & Ph #): OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-2884

**D. Currently Applicable Classification Level:** Unclassified

**E. Distribution Statement A:** Approved for Public Release

**F. The foregoing information was compiled and provided by:**  
**DTIC-OCA, Initials:** VM **Preparation Date** 10/22/99

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.